AMENDED CLAIM SET

The claims have been amended as set forth in the following listing of the claims:

Claims 1-9 (Canceled)

10. (Currently Amended) Ophthalmological examination and/or treatment station for a human patient's eye, comprising: ~~(301) with~~

an optical measuring arrangement; ~~(312, 311, 309, 131) and~~

an evaluation unit ~~(317)~~ connected to the latter in signaling terms; ~~signalling terms,~~

wherein said optical measuring arrangement and said evaluation unit having a modular configuration, said modular configuration further including,

~~said modular configuration having~~

a patient module adapted to be positioned directly in front of the human patient's eye and arranged remote from the evaluation unit; ~~(303)~~,

an illuminating device arranged remote from said patient module; ~~(305)~~,

a first optical fiber; ~~fibre (304)~~,

an observation device; ~~(325a/b, 326a/b, 315, 322, 323)~~ and

a second optical fiber~~fibre (309)~~,

~~said patient module (303) being positioned directly in front of the human patient's eye (301) and being arranged remote from the evaluation unit (317),~~

~~said illuminating device (305) being likewise arranged remote from said patient module (303),~~

wherein, ~~—~~said patient module is ~~(303) being~~ connected detachably by said first optical fiber ~~fibre (309)~~ with said illuminating device ~~(305)~~,

~~—~~said patient module has ~~(303) having~~ at least one first fiber ~~fibre~~ coupler part,

~~—~~said first optical fiber has ~~fibre (309) having~~ a first counterpart adapted to the at least one first fiber ~~fibre~~ coupler part for said detachable connection between the patient module ~~(303)~~ and the illuminating device ~~(305)~~,

~~—~~said illuminating device produces ~~(305) producing~~ a first radiation ~~conductable~~conductible with said first optical fiber~~fibre (304)~~,

~~—~~the patient module has ~~(303) having~~ a first collimator ~~(310a)~~ interacting with the first optical fiber ~~fibre (304)~~ for converting said first radiation into a first free-space beam ~~(307)~~,

~~—~~said observation device is ~~(325a/b, 326a/b, 315, 322, 323) being~~ arranged in the patient module ~~(303) and preferably being connected detachably to the evaluation unit (317)~~,

~~—~~said optical measuring arrangement has said ~~device (312, 311, 309, 313) having at least one~~ second optical fiber ~~fibre (309)~~ guiding a second radiation,

~~—~~said patient module has ~~(303) having~~ a second collimator that converts ~~(310b)~~

~~said second collimator (310b) converting~~ said second radiation of said second optical fiber ~~fibre (309)~~ into a second free-space beam, and ~~(312),~~

~~—~~said patient module has ~~(303) having~~ at least one second fiber ~~fibre~~ coupler part ~~(311)~~ and said second optical fiber has ~~fibre having~~ a second counterpart adapted to the at least one second coupler part for ~~doing~~ a detachable connection to said second collimator ~~(310b)~~.

11. (Currently Amended) Examination and/or treatment station according to claim 10, wherein said observation device is ~~having~~ a display element ~~(315) being~~ arranged on the patient module ~~(303)~~ and

said observation device has ~~having~~ a detachable electrical signal line ~~(316)~~ for a detachable connection between the display element ~~(315)~~ and the evaluation unit ~~(317)~~.

12. (Currently Amended) Examination and/or treatment station according to claim 10, wherein the observation device ~~(325a/b, 326a/b, 315, 322, 323)~~ is designed with an eyepiece ~~(323)~~ arranged in the patient module ~~(303)~~ and with an objective lens ~~(322)~~ for eye examination.

13. (Currently Amended) Examination and/or treatment station according to claim 10,

wherein the observation device ~~(325a/b, 326a/b, 315, 322, 323)~~ has an image detecting element ~~(CCD) (326a/b)~~ and an optical unit ~~(325a/b)~~,

said optical unit projects ~~(325a/b) projecting~~ an area of the eye to be examined onto said image detecting element ~~(326a/b)~~,

the image detecting element ~~(326a/b)~~ and optical unit are ~~(325a/b) being~~ arranged in the patient module ~~(303)~~.

14. (Currently Amended) Examination and/or treatment station according to claim 10, further comprising: ~~having~~

_____a holding device ~~(333)~~ for the patient module ~~(303)~~.

15. (Currently Amended) Examination and/or treatment station according to claim 10, wherein said evaluation unit is ~~(317) being~~ made computer-assisted for an evaluation or measurement of first data and

said examination and/or treatment station has ~~station having~~ data memories containing second retrievable data,

said optical measuring arrangement ~~(312, 311, 309, 131)~~ or said observation device is ~~(325a/b, 326a/b, 315, 322, 323)~~ ~~being~~ connected to said evaluation unit ~~(317) for evaluating measuring data~~,

said examination and/or treatment station has ~~station having~~ a data network for connecting said evaluation unit ~~(317)~~ with said data memories, whereby

said evaluation unit is adapted to process ~~unit being able processing~~ said first and said second data.

16. (Currently Amended) Examination and/or treatment station according to claim 10, wherein

said optical measuring arrangement is ~~(312, 311, 309, 131) being~~ an optical arrangement of a Michelson interferometer type,

said optical measuring arrangement has ~~(312, 311, 309, 131) having~~ a radiation source ~~(9; 73; 92; 149; 191a-e)~~ emitting said second radiation,

said second radiation is ~~radiation being~~ a short-coherent radiation,

said optical measuring arrangement is ~~(312, 311, 309, 131) being~~ essentially a fiber-optical ~~fibre-optical~~ arrangement,

said optical measuring arrangement is ~~(312, 311, 309, 131) having~~ a measuring branch ~~(7; 72; 92; 157b)~~,

said measuring branch has ~~branch having~~ said second optical fiber~~fibre~~ ~~(309)~~,

said second optical fiber transmits ~~fibre (309) transmitting~~ a first part of said short-coherent radiation ~~(second radiation)~~,

said measuring branch has ~~branch having~~ said second collimator ~~(310b)~~,

said first part of said short-coherent radiation is ~~(second radiation) being~~ converted by said second collimator into said second free-space beam,

said first and second free-space beam is ~~free-space beam being~~ directed at the human patient's eye as an optically transparent and/or diffusive reflecting object ~~(1, 1', 1''; 147; 205)~~,

said optical measuring arrangement has ~~(312, 311, 309, 131) having~~ a reference branch ~~(5; 67; 86a, 86b; 157a)~~,

said reference branch transmits ~~branch transmitting~~ a second part of ~~radiation of~~ said short-coherent radiation,

said reference branch has ~~branch having~~ a path length variation unit ~~(39; 55; 61; 71; 89; 161v)~~ for modifying a transit time of said second part of said short-coherent radiation in said reference branch;

said reference branch has ~~having~~ two reflectors,

_____said reflectors divides said ~~dividing said~~ second part of said short-coherent radiation in a third and in a forth part, whereby said forth part getting a first optical path length is ~~length being~~ different to a second optical path length to said third part,

said measuring branch has ~~branch having~~ a measuring-branch-optical-fiber~~fibre~~,

said measuring-branch-optical-fiber is ~~fibre being~~ disconnectable by fiber ~~fibre~~ coupling devices.

17. (Currently Amended) Examination and/or treatment station according to claim 16 wherein ~~said reference branch having at least two reflectors (31a, 31b; 49, 50; 57a, 57b; 87a, 87b; 161a-c; 161a-d),~~

said ~~at least~~ two reflectors are ~~being~~ retroreflectors.

18. (Currently Amended) Examination and/or treatment station according to claim 16, wherein

said optical measuring arrangement has ~~(312, 311, 309, 131) having~~ an optical element ~~(35; 61)~~ in said reference branch ~~(5)~~, which optical element covers the reflectors ~~(31a, 31b; 57a, 57b)~~ in succession with said second radiation.

19. (Currently Amended) Examination and/or treatment station according to claim 13, wherein

said image detecting element ~~(326a/b)~~ and said optical unit ~~(325a/b)~~ are formed in a pair and

the pair parts are arranged at a distance from one another in order to permit stereoscopic observation.

20. (Currently Amended) Examination and/or treatment station according to claim 14, wherein

said holding device is ~~(333) being~~ designed as an aligning device for positioning in front of the human patient's eye ~~(301)~~.

21. (Currently Amended) Examination and/or treatment station according to claim 10, wherein

said patient module has ~~(303) having~~ a geometric design in the order of size of a contact lens in order to take up only a small area of space in front of the patient.

22. (Currently Amended) Examination and/or treatment station according to claim 10, wherein

said patient module ~~(303)~~ takes place only of just one apparatus but by its integration into said modular configuration achieving a functionality of a number of different individual apparatus.

23. (Currently Amended) Examination and/or treatment station according to claim 17, wherein

said ~~at least two~~ reflectors are ~~being~~ offset in said reference branch at a different depth.

24. (Currently Amended) Examination and/or treatment station according to claim 23~~claim 17~~, wherein

said at least two reflectors are offset ~~being offset~~ in said reference branch at a different depth and are movable ~~being movable~~ with one another for generating together a transit time modification and transit time difference.

25. (New) Examination and/or treatment station according to claim 10, wherein said observation device is connected detachably to the evaluation unit.